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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/568,424

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Takashi Yoshimine

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EXAMINER

NGUYEN, THONG Q

ART UNIT

PAPER NUMBER

2872

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/568,424	YOSHIMINE, TAKASHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Thong Nguyen	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006 and 11 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/14/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Pre-Amendment***

1. The present Office action is made in response to the pre-amendment filed on 2/14/06.
2. It is noted that in the pre-amendment, applicant has made changes to the drawings and the claims. Regarding to the claims, applicant has amended claims 11-16. There is not any claim being added or canceled from the application. The pending claims 1-16 are examined in this Office action.

### ***Election/Restrictions***

3. Applicant's election with traverse of Species (I), figures 1-3, in the reply filed on 9/11/08 is acknowledged. The traversal is on the ground(s) that the examination of all claims poses no undue burden on the examiner. This is not found persuasive because of the following reasons.

As clearly stated that in the restriction, requirement, the two groups of species (I) and (II) comprises different features which are mutually exclusive from each other. The group of claims directed to species (I) comprises features related to a first optical system that obtains a magnified image of an object. Such a feature is not found in a condensing system for a transmissive microscope. Further, the group of the claims 1-8 of the species (I) comprises a feature related to a barrel for containing two optical systems in which one system is used for a darkfield illumination and the other system is used for obtains a magnified image of an object. Both mentioned features are not recited in the group of claims 9-16 of the species (II). The similar viewpoint is also

applied to the group of claims 9-16 of the species (II). The group of claims 9-16 of the species (II) recite features which are not found in the group of claims 1-8 of the species (I). For instance, the feature related to a diaphragm for restriction a darkfield illumination light in a ring shape is not recited in the group of claims 1-8 of the species (I).

As a result, the different features recited in one group of the claims but not recited in the other group causes different searches for such separated features, and thus clearly pose an undue burden on the examiner is a restriction requirement is not made.

The requirement is still deemed proper and is therefore made FINAL.

As a result of applicant's election, claims 1-8 which are directed to the elected species are examined in this Office action, and claims 9-16 have been withdrawn from further consideration as being directed to non-elected species.

### ***Drawings***

4. The six replacement sheets contained corrected figures 7A-B, 8A-B, 9A-C, 10A-C, 11A-C and 13 were received on 2/14/06. These drawings are approved by the examiner. As a result, the application now contains six sheets of figures 1-6 and 12 as filed on 2/14/06 and six replacement sheets contained figures 7A-B, 8A-B, 9A-C, 10A-C, 11A-c and 13 as filed with the Pre-amendment of 2/14/06.

5. Figures 10A-B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See present specification in page 20. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement

sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p) (5) because they include the following reference character(s) not mentioned in the description: The references "7-2", "7-3", "7-4", "7-5", 7-8", "7-9", "7-10" and "7-11" as shown in each of figures 4-6, 8A-B, and 9A-B are not mentioned in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) is required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

7. The abstract of the disclosure is objected to because it contains more than one paragraph. Correction is required. See MPEP § 608.01(b).

8. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Specification***

9. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

10. The specification is objected to because it does not have a summary of the invention. It is also noted that the arrangements of all sections as provided in the present specification does not comply with the U.S. practice. Appropriate correction is required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

**Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A

“Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

11. The disclosure is objected to because of the following informalities: a) Page 2: lines 1-6, the paragraph thereof “However, when the...be detected” has at least one grammatical error. In particular, the sentence “since a ring-shaped light...be detected” (lines 2-6) has a grammatical error; b) Page 12: line 14, “bright” should be changed to --dark--; c) Page 13: line 6, “Fig. 7” should be changed to --Fig. 6--. There are still some grammatical and idiomatic errors in the specification. Applicant should carefully proofread the specification. Appropriate correction is required.

### ***Claim Objections***

12. Claims 1-8 are objected to because of the following informalities. Appropriate correction is required.

a) In claim 1: on line 6-7, the feature thereof “the incident area of the dark field illumination light” lacks a proper antecedent basis. Should the term “the” appeared before the term “incident” be changed to --an--?

b) In claim 2: on line 3, the feature thereof “the optical axis of the first optical system” lacks a proper antecedent basis. Should the term “the” appeared before the term “optical” be changed to --an--?



c) The remaining claims are dependent upon the objected base claims and thus inherit the deficiencies thereof.

***Claim Rejections - 35 USC § 112***

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claims 3-6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claim 3 is rejected under 35 USC 112, second paragraph because it is unclear about the operation of each of the shield plates as recited in the feature thereof “a first fit portion that fits the hold member so that each of shield plates can be opened/closed” (lines 4-5) of the claim. In other words, it is unclear about the mechanism which has only a fit portion that fit the hold member can open and/or close the shield plate as claimed.

b) The remaining claims are dependent upon the rejected base claims and thus inherit the deficiencies thereof.

***Claim Rejections - 35 USC § 102***

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

16. Claim 1, as best as understood, is rejected under 35 U.S.C. 102(b) as being anticipated by Baurschmidt (Germany reference No. 34 09 657).

Baurschmidt discloses a darkfield illumination system for a microscope. The illumination system as described in pages 6-8 and shown in figs. 1-2 comprises the following features: a) a first optical system (1) that obtains a magnified image of an object; a second optical system comprises an annular lens (5, 3) for guiding darkfield illumination to the object; c) while Baurschmidt does not explicitly disclose a lens barrel for supporting both the first optical system and the second optical system; however, such a lens barrel inherently exists to support the optical elements of the first and second optical system. Regarding to the optical path around the first optical system for darkfield light, such feature is shown as can be seen in the figure 1 which shows an optical path from the light source assembly (12) to the object via the lens (5), the reflector 93) and around the first optical system (1); and d) a mechanism (13-15) disposed on the optical path of the darkfield light wherein the mechanism is operated to vary an incident area of the darkfield illumination light.

17. Claims 1-3 and 6-7, as best as understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Osamu (Japanese reference No. 10-31164, submitted by applicant).

The objective lens system having a means for shielding darkfield illumination as provided by Osamu meets all features recited in the present claims 1-3 and 6-7. In particular, in paragraphs [0017]-[0020] and in figs. 4-5, Osamu discloses an

objective lens system having the following features: a) a first optical system (2) that obtains a magnified image of an object (5); a second optical system comprises an annular lens (3) for guiding darkfield illumination to the object (5); c) a lens barrel (1) supporting both the first optical system and the second optical system wherein the lens barrel (1) defines an optical path around the first optical system for darkfield light (4); d) a mechanism (8-12) disposed on the optical path of the darkfield light wherein the mechanism is operated to vary an incident area of the darkfield illumination light. See in particular, paragraph [0019] and figs. 4-5. Regarding to the structural relationship between the mechanism (8-12) and the lens barrel, Osamu discloses that the barrel (1) comprises a hold member which holds the first optical element (2) (Note that while the claim 3 recites that the lens barrel has a hold member that holds the first optical system; however, the claim has not provided any specific feature/structure between the hold member and the first optical system. The lens barrel (1) as provided by Osamu, as shown, acts as a hold member for holding the first optical element (2) inside the lens barrel (1)), and the mechanism (8-12) comprises an outer case (11) that fits the hold member (1); a second portion (10); and a plurality of blades (12) arranged in a layered configuration along the direction of the optical axis of the first optical element (2) wherein each blade comprises a first end rotatably connected to the outer case (11) and a second end movable along a corresponding groove (10a) formed on the second portion (10), and an adjusting device (9) for moving the blades (12) with respect to the outer case (11) and the second portion (10) to

varying the incident area of the darkfield illumination light. It is noted that the movements of the blades (12) due to an operation of the adjusting device (9) cause an overlap of the blades with respect to each other. See figure 5(a).

Regarding to the feature that at least one blade has a handle protrudes from the barrel, it is noted that each end of the blades (12) which connects to the outer case (11) and the second portion (10) comprises a protrusion which protrudes from the lens barrel. Applicant should note that while claim 7 recites that the handle protrudes from the lens barrel; however, the claim has not recited any specific feature/limitations related to the structure of the so-called "handle" and the direction to which the handle is protruded with respect to the lens barrel.

### ***Conclusion***

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thong Nguyen/

Primary Examiner, Art Unit 2872